

Suréq
Pukidai
Shiriana
Samatari

/17 cont. /

411 barter. For smoothing, they use the inner edge of the eye-tooth
412 from the lower jaw of a wild pig and the rough leaves of the
322 curatella (Cecropia peltata), which gives the bow a beautiful,
237 shiny appearance.

824 The bowstring -- penahitábe --, which consists of three
411 strands of curausá (Bromeliaceae) fiber strings twisted to the right,
233 is fastened to the bow ends with a simple knot. If one wants to
tighten up the bow, the string must be twisted more, which makes
it shorter.

411 The bow described may be immediately classified as one of
191 the typical bow-forms of Guiana, which Métraux characterizes as
114 follows: "Guiana bows were generally convex on the belly while
the back or outer surface was concave or flat" /cited in English/ (66).

66. Métraux, 1949, p. 232.

According to Meyer's classification, on account of its semi-circular cross-section, it would /18/ belong to the North Brazilian bow-type; on the basis of the material, however, to the Peru group, because it is not the reddish-brown, smooth leguminous wood, but that of the pupunha palm (67). P. Schmidt also

67. Meyer, no date, p. 31.

devotes a rather long section to this "reverse form of the flat bow" and already lists the following tribes north of the Amazonas where it occurs: "Kanamare on the Rio Jurua, Trio, Ojana, Makusi, Wapisiana, Uaupe, Porokoto, Passe (child's bow), Siriana on the Rio /Fig. 2 appears here. / /19/ Uraricapara, Motomoto" (68). On the basis of the descriptions and illustra-

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114 68. P. Schmidt, 1913, p. 1030.

tions of the Xirifna bow which Koch-Grünberg gives (69), it is

69. Koch-Grünberg, 1923a, p. 311 and
PL 47 (1 and 2a, b, c, d).

[Text continues on p. 39]

Surfara
Pakidfi
Shiriana
Samatari

/19 cont. /

411 which the Surfara and Pakidfi plant in the vicinity of their malokas
[249] on the upper Aracá and the middle Demini, respectively. All five
[824] of the arrow types used by them have the same feathering --
[237] jaromahik --, which consists of two halves of the black wing feathers
of the mutum (Crax sp.) -- parurf. They are placed against the
cane in such a way that they alternately show the upper and the
• [283] lower side of the feather. At several places on the hand end they
are held by two threads of the tight winding of Bromelia fibers --
pemakasiurakama. Inside this winding, which is supposed to
strengthen the weak cane against the pressure of the bowstring, there
is stuck on the end of the cane in addition a small wooden peg
fastened with resin, which has a notch in its thickened outer part,
which is set on the bowstring. This is supposed to prevent the
cane from splitting when the arrow flies off. The upper end of the
feather shaft is wound with a second, narrower winding, in which,
between the two halves of the arrow feathers, two additional
small black mutum feathers are frequently stuck as ornaments
(Fig. 2f).

411 The feathering described belongs to the Guiana type of
184 feathering, according to the classification by Meyer (73). Koch-
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73. Meyer, no date, p. 9.

Grünberg (74) confirms it for the Xiriana, and it can also be recog-

74. Koch-Grünberg, 1923a, p. 312 and
Pl. 47 (4, 7, 8).

nized on the arrows which that investigator brought back for the
Hamburg Museum für Völkerkunde und Vorgeschichte (Koch-
Grünberg Collection, 12.25:33-42). The arrows in the Alfred
Boeldecke Collection (56.15:5-7) in the same museum and the
drawings by Vinci (75) show that the Xamatari likewise use this

75. Vinci, 1956, p. 146, Fig. 2.

Surára
Pakidái
Xamatári
Karimé

411 /19 cont./

184 feathering, and, according to Salathé, it is also to be found
114 among the Karimé (76).

76. Salathé, 1931/32, p. 300 and
Figs. 3 and 4.

411 There is an astonishingly wide range of variation for the
arrow points, of which the following five different types occur
among the Surára and Pakidái:

1. Kantaná -- It is a wide, lancet-shaped bamboo point, 25-28
centimeters long, both /20/ ends of which come to a point; the
[53] width in the center is 3-4 centimeters. The upper side is rounded
off, and the lower one, occasionally somewhat hollowed out, is
[283] sometimes painted with black dots. It is inserted in the slightly
split arrow shaft and tightly wound with Bromelia fibers (Fig. 2a).
Since the arrows with this large point have particularly great
penetrating power, they are used chiefly for the hunting of tapirs
and jaguars; moreover, they are used for warlike encounters.
Every Surára and Pakidái man always carries two or three such
reserve points in his quiver.

411 Salathé found similar points among the Karimé (77) and
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77. Salathé, 1931/32, pp. 299/300
and Fig. 3b.

Vinci among the Xamatári (78). Moreover, they are confirmed

78. Vinci, 1956, pp. 145 and 146, Fig. b.

for the latter Indians by a specimen in the Hamburg Museum für
Völkerkunde und Vorgeschichte. (Alfred Boeldecke Collection,

56.15.5. Length, 23 centimeters; width in the center, three
[53] centimeters. On the lower hollowed-out side, this point is painted
with a black, serpentine line.)

Xiriána
Surára
Pakidái

/20 cont./

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[283] The lancet-shaped bamboo points of the Xiriána investigated by Koch-Grünberg, on the other hand, have a somewhat different shape. Here the two ends do not come to a point, as among the Surára, Pakidái, Karimé, and Xamatári, but rather one end is thickened, hollowed out, and, wound with Bromelia fibers, is set on a wooden shaft inserted in the arrow cane (79). Three such

79. Koch-Grünberg 1923a, p. 312 and Pl.

47 (5, 8).

Xiriána arrow points of the Koch-Grünberg Collection in the Hamburg Museum für Völkerkunde und Vorgeschichte have, moreover, the respectable length of 34 centimeters (12. 25:37) and 35 centimeters (12. 25:34-35).

Inasmuch as the Surára and Pakidái, according to their own statements, borrowed their lancet-shaped bamboo points from the Xiriána, the ensuing alteration process is quite significant, since, indeed, the point is no longer mounted on a wooden shaft, but is inserted directly into the arrow cane.

Furthermore, lancet-shaped bamboo points have been confirmed for the Waiká by Zerries (80) and Schuster (81), but it is

80. Zerries, 1956b, p. 151.

81. Schuster, 1958b, p. 17.

not clear from their texts whether this is the same type as that of the Surára, Pakidái, etc. or that of the Xiriána.

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171 How greatly the lengths and attachment possibilities of such bamboo points vary among South American Indians is very clearly shown by the comprehensive investigations of Meyer (82) and

82. Meyer, no date, pp. 18, 19, 25, 27,

30, 36, 37, 47, 48, 49, and Plates I, 11,

13; II, 16; III, 14; IV, 8, 15.

Surará
Pakidái

/20 cont./

41
[171] Métraux (83).

83. Métraux, 1949, pp. 236/37 and Fig. 64.

● [283] 2. Rahaká -- This is a narrower lancet-shaped bamboo point which
[824] is inserted in the arrow cane wound with Bromelia fibers in the same way as the kantaná (Fig. 2b). The individual points are 20-22 centimeters long and 1.5 - 2 centimeters wide in the middle. Wild pigs, water hogs (capybara), deer, pacas, and cutias (see p. 4) are killed with them. It is noteworthy that such narrow bamboo points have hitherto not been mentioned in the literature.

[237] 3. Kantarím -- Point with barb, made from a twin-pointed piece
[283] of bone from the cuatá (Ateles paniscus L.). This is lashed, by
[314] means of a winding of Bromelia fibers additionally coated with pitch, parallel to the upper end of a wooden shaft inserted in the arrow cane (Fig. 2c). With this arrow tip, which is very widespread in South America, the Surára and Pakidái shoot birds and fish.

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[114] According to the classification by Métraux, it belongs to
[171] the second principal type of arrow points occurring in the tropical forest region of South America (84). Meyer mentions that it is

84. Métraux, 1949, p. 237.

used in Guiana, but also in western Brazil and among the Karajá
[184] /Caraja/ (85). Within the Yanoámi group, they have furthermore

85. Meyer, no date, p. 18.

been documented for the Xiriána (86), Karimé (87), Xamatári (88),

86. Koch-Grünberg, 1923a, p. 312
and Pl. 47 (7).

87. Salathé, 1931/32, p. 300 and Fig. 3c.

88. Vinci, 1956, pp. 144 and 146, Fig. c.

/22 cont. /

Boys' bow:

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[824]

The boys' bow -- hauoá -- is 80-90 centimeters long and consists of a curved branch of the paioórimá tree, which also furnishes the material for the bird arrow-points. As in the case of all branch-bows, the arms are of different lengths, so that an unsymmetrical shape is produced, which affects the accuracy of the



Fig. 3. Position for shooting with the bow.

shot. This is of no consequence, however, since these are merely
● 283] toy bows for small boys. On both ends the bow staff is tapered and
[824] set off to receive the bowstring -- pebatábe -- which is made out of a
liana (cipó-titica) (Fig. 2g).

Boys' arrows:

[192]

[824]

[237]

[283]

[192]

Ruhumaçik is the name of the thin arrow, 80-90 centimeters long, for boys, which the fathers make out of the wood of the inaja palm Maximiliana regia Mart.) -- kareximaçí. The feathering -- jaronahík -- consists of two small halves of mutum feathers, which are lashed to the shaft with a thread of cotton. Instead of an arrow point mounted separately, the arrow here is only slightly pointed (Fig. 2h); the designation for it is -- peimaçikenâme.

Surára
Pakidái

372 /25 cont. /

(see p.116) and are /26/ connected with a small groove at the side. The hole is enlarged by the drilling. There is loosened a fine dust which slowly starts to smoke and glow and, by way of the groove, falls on tinder previously placed next to it (dry grass, leaves, or dry splinters of bamboo), which quickly catches fire. Cautiously the man blows upon it, and a short time later a flame leaps up. This requires a great deal of practice and skill, however; often he [171] has blisters on his hands after drilling. This is the most widely distributed method of producing fire in South America (120). In their malokas

120. Nordenskiöld, 1924, pp. 118-125
and Map 13.

the Surára and Pakidái preserve the fire.

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5. Twining and Spinning

[824]

For making thread and cord the leaf fibers of a Bromeliaceae, curauá (121), and cotton are used, the latter, however, only in more recent times.

[114]
[171]

121. Koch-Grünberg also verifies the use of this material for the northwestern Brazilian tribes (Koch-Grünberg, 1910, p. 210).

[462]

While to this day the curauá fibers are worked, mostly by men and only occasionally by women, with the right hand against the right thigh in the direction of the knee, to produce thread twisted to the right (122), a spindle is used to make cotton thread,

[171]

122. Threads which are not spun with the spindle are twisted to the right among most of the South American tribes. There are exceptions, however, for among a few nations of northwestern South America threads twisted to the left are more prevalent, and

Surára
Pakidái

/26 cont. /

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[171]

122. (cont.)
in Guiana as well as in the Gran Chaco
both thread twisted to the right and thread
twisted to the left appear (Frödin and
Nordenskiöld, 1918, p. 50).

[462]

with which, however, a left twist is associated. The treatment of
cotton -- xinarí --, starting with picking, then drying and bleaching,
removal of the seeds, loosening and plucking apart, up to the
spinning, is women's work.

The spindle -- xinarikā -- consists of a smoothed stick --
ruhú -- 30-35 centimeters long, for which the rib of a palm leaf
is also often used, on the upper end of which a small barb --
nhobanā -- of the same material is attached with a cotton thread.

[321]
[322]
[462]

The disk-shaped whorl -- tankarā --, made by the men out of bone
or wood, is slipped onto the stick from below and rests in the center
of it. To prevent it from slipping off when the woman holds
her spindle in a vertical position, there is a wrapping of cotton below
the whorl.

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From the description it may be seen that this is a typical
Guianese variation of the "Bakaírf /Bacairi/ spindle." "Only in
Guiana and on the Amazon River," Frödin and Nordenskiöld write
in their study, "Über Zwrnen und Spinnen bei den Indianern
Südamerikas /On Twining and Spinning among the Indians of South
America/, "do we find the spindles provided with barbs, which,
however, differ from the other Bakaírf spindles only in that the spindle
whorl rests near the center of the stick (Fig. 40)" (123).

123. Frödin and Nordenskiöld, 1918, p. 24.

In two other respects, however, the spindles of the Surára and
Pakidái differ somewhat, for among them the stick is not thickened
at the bottom, and the whorl is held by a wrapping of cotton.

Surára
Pakidái

/26 cont./

Up to now there has been only one parallel to this, namely a Quechua spindle (124). The spindle of the Karimé, on the

124. Frödin and Nordenskiöld, 1918,
pp. 26/27.

basis of the drawing in Salathé's article, seems to resemble those of the Surára and Pakidái (125). Unfortunately, Salathé does

125. Salathé, 1931/32, p. 305, Fig. 14.

not indicate whether the whorl is held in position by a wrapping put on below it or perhaps by means of resin or wax, as is the case, for example, for the spindles of the Chama and Pauserna (126).

126. Frödin and Nordenskiöld, 1918,
pp. 26/27.

283 This already exhausts the comparisons with regard to the securing of the whorl by means of a wrapping, wood, or wax, so that no conclusions about origin and distribution can as yet be drawn about it.

283 123 During the time I lived with the Surára and Pakidái, I found that many women preferred to use the lids of my empty powder-boxes and skin-cream jars as whorls, /27/ and they preferred to spin the surgical cotton which I carried with me rather than their cultivated cotton, because, they said, the threads spun from it were stronger and more durable.

283 Spinning is done in the following way: The woman sits on a thin tree trunk with the lower part of her legs bent back. The cotton that is to be worked hangs over her left shoulder and from there the thread is fed out with the fingers of the left hand. She first rolls the spindle, on the barb of which she has fastened the thread, in a horizontal position with the palm of her right hand on her slightly sloping right thigh, moving her hand rapidly from the knee upwards. This gives the thread a

Surára
Pakidái

/27 cont. /

283 left twist. Then she lets the spindle fall to a vertical position between her legs and rotate on the ground.

[170] This method belongs to Variation I of the Bakaíri spinning (127), which is extraordinarily characteristic for the

127. Frödin and Nordenskiöld, 1918,
pp. 34 and 46.

Guiana tribes and which is described in a similar manner by Koch-Grünberg (128), Frödin-Nordenskiöld (129), Im Thurn (130),

128. Koch-Grünberg, 1923a, p. 86.

129. Frödin and Nordenskiöld, 1918,
pp. 52 and 56.

130. Im Thurn, 1883, p. 282.

and Roth (131).

131. Roth, 1929, p. 23 and Pl. I and II.

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437 The spun threads are wound into round balls, which in this form are used as tribute payment to the Xiriána (see pp. 159/160) and also represent popular trade items, exactly as in the case of the Arekuná-Taulipang and their neighbors (132).

132. Koch-Grünberg, 1923a, p. 86.

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174 The cotton, the spindle, and the technique of spinning it to the left presumably reached the Surára and Pakidái from Karaiben /Carib/ tribes by way of the Xiriána. The fact that cotton and spindle represent imports becomes clear in particular from the technique of the left twist, since in the case of the original material, the curauá fibers, the threads are always twisted to the right. Im Thurn already points out that in Guiana

[171]
[114]

Surára
Pakidái

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/27 cont./

it is chiefly the Karaiben who spin thread out of cotton, and he believes that they also brought along cotton and the spindle when they immigrated into Guiana (133). The latter assumption

133. Im Thurn, 1883, p. 287.

has, however, not yet been proved, for on the upper Río Negro Koch-Grünberg met Karaiben tribes who were acquainted with neither cotton nor the spindle. To an inquiry by Frödin and Nordenskiöld about this, he replied in a letter as follows: "It is an absolute mystery to me why the Indians on the upper Río Negro do not plant cotton for spinning and have no spindles. It would be important to investigate how far this absence of spindles extends down the Río Negro and into its tributaries, which, to be sure, from the Curicuriary downward, are almost completely unknown ethnographically" (134).

134. Frödin and Nordenskiöld, 1918,
p. 21, footnote 1.

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Within the Yanonámi group, cotton and spinning are known, in addition to the Xiriána, Surára, and Pakidái, also to the Puseheweterí, Aramamesterí, and Karauaterí, members of whom I met in the malokas of the Surára and Pakidái, and also to the Karimé (135) and the Waiká, who, according to Schuster,

135. Salathé, 1931/32, p. 305 and
Fig. 14:

presumably became acquainted with cotton through the Karaiben Makiritare (136).

136. Schuster, 1958b, p. 16.

Surara
Pakidai

/27 cont./

6. Dress and Ornament

291 a) Hip cords and belts

From the age of four on both sexes constantly wear a hip cord -- nhamaaxi -- which is made by the women, but occasionally also by men, out of curauá fibers, the original material (see p. 55), or out of cotton. For the former, two strands are twisted to the right, and for the latter, to the left. The old technique of the right twist in the working of curauá fibers was thus retained, in spite of the adoption of cotton. There is, however, a further important difference. Whereas the hip cord of cotton represents the everyday dress, so to speak, /28/ the one made out of curauá fibers is at present used almost solely for ceremonial purposes.

All male Surara and Pakidai tie the penis up by means of the hip cord, which is done before donning it by tying a knot and drawing the foreskin through it.

With the hip cord these Indians feel clothed, and they therefore never take it off, not even for sleeping or bathing. Once when I was out hunting with the war chief of the Pakidai, Poréhiwō, he happened to tear his hip cord. He modestly stepped behind the nearest tree immediately and tied it together again. Later he told me that it would be the most flagrant offense against good form to walk about without the hip cord. The women would then cover their faces and scream loudly.

[689] Hence a man may never appear with his penis hanging down, and it would be a positively execrable crime, which is punished by blows, if he exposed his glans to the eyes of women and girls.

This shows that among the Surara and Pakidai the hip cord in general, for women and girls also use it without covering anything with it, and the tying up of the penis in particular are associated with feelings of propriety (137). I am herewith able to

[191]
[482] 137. The hip cord is never used as a device for carrying utilitarian articles, as Baldus noted, for example, among the Tapirapé

Surára
Pakidai

291 /36 cont. /

171 been documented for the men of the Makuxí (193) and Waiwai (194).

193. Farabee, 1924, p. 61.

194. Farabee, 1924, Pl. XXX.

b) Chest cords

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The simple cord slung crosswise over chest and back --

[192] xinaríke -- and the similarly used string-bundle -- xinarí -- (195)

195. This name is identical with the word
for cotton.

represent among the Surára and Pakidai characteristic articles of clothing for the girls and women. Among the latter, the cord or string-bundle runs directly below the breasts and crosses over the chest cavity, so that, at first glance, it looks like a bust support; but no lifting of the breast is connected with it, for it is quite loose (Ill. 10).

• (283) Whereas the women's cord, 1.50-1.60 meters long, twisted
(824) out of two threads, and knotted at the ends, is made of curauá
fibers or cotton (the length of the corresponding girls' cord is 1.20-1.40 meters), in the case of the string bundles there are layers of cotton 56-90 centimeters long, which consist of 60-80 strings and are tied together at one point. The thinner specimens are used by young women and the thicker ones by older women.

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Both the string bundles and the cord are either dyed red all over

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or, as in the case of the former, for example, are provided with

(531)

red rings, one centimeter wide, at intervals of 6-7 centimeters

(302)

(Fig. 13a and b), for which urucú dye is used. Undyed objects in time take on a dirty brown appearance, like the hammocks, for the red body-painting adheres to the cotton.

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856 The chest cord, which is now and then tied around little girls from four years old on, is supposed to help give them beautifully shaped breasts later on. Even the younger women, however, have

/37 cont. /

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13a

Fig. 13a-b. Chest string-bundle of the women (detail and diagram of the painting).



13b

301 c) Cords for arms, wrists, and legs

From the age of four on both sexes at times wear upper-arm cords, and women and girls in addition wrist- and leg-

• [283] cords, which are made of curauá fibers or cotton. It was also definitely established that the two-strand curauá-fiber cords twisted to the right are the original objects, whereas the two-strand cotton cords twisted to the left are of more recent

[824] date. Moreover, here, too, it was observed that a strengthening effect is attributed to the plant fiber.

[856]

/202 cont. /

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They make fire by the rotation method, and the sticks which they use in this process are carried with them tied to the quiver (cf. Barker, 1953, p. 462, Fig. 6). If the camp is situated at a relatively short distance, the women carry a piece of lighted firewood upon which they blow on the way so that it will not go out. Fire is a source of light and heat in the rancherias, and they keep it burning all night long to protect themselves from the cold, from evil spirits, and from dangerous animals.

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The Sanemá women spin cotton by means of a spindle which they roll on the thigh. The cord is twisted with three threads.

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[323]

They do not weave and use the thread only to make ornaments, guayucos /loincloths/, and sometimes hammocks /hamacas/ and güenepes. The baskets that they manufacture are well made and are very useful for carrying the products of the conuco, firewood, and sometimes large pots made of baked clay; the method that they employ to make baskets (twining) is primitive, common to the marginal peoples of South America. The Sanemá make pottery vessels, conical in shape, but their method is very primitive. The most common container is the gourd.

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[237]

A cutting implement (gouging tool) which is widely used is the knife made with agouti teeth. It is used exclusively by the men and is made by attaching an incisor of the rodent to a small stick 10 centimeters long by means of gum and a fine plant-fiber. The men carry it in the quiver, under their arm ornament, or, as we saw on the upper Ventuari, in the opening of the ear lobe. With this instrument they make arrows; it is used to mount the point or to open the lower end of the shaft where the peg, provided with a groove for the bowstring, is inserted. The groove is also made with the tooth knife. Becher (1960, p. 54) reports that jealous Surará and Pakidai men sometimes use it to wound their wives, and an informant from the Erebató told us that they also used it to gouge out the eyes of enemy men who had been captured and identified as murderers of a member of the group. The Indian said that once they have gouged out the eyes they free their victims, who die a few days later in the forest. The knife is sharpened with a stone. This type of primitive knife [184] has been found in most of the Yanoama subtribes: Waika

[593]

[727]

[184]

Nabudub

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142
516
854



Nabudub Indians in front of their house, an imitation of a Makiritare house,

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● 283

A Nabudub (Sanema) nuclear family in front of its house. The hammocks are of vegetal fiber.



RED CLOTH AND GREEN FOREST

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The Samatari were eating all sorts of things: there were stacks of little green bundles, which would have made the smiling Sempronio die with envy. (Where he had disappeared to, we did not know.) These provisions were piled up under tiny roofs of leaves, beside little pyramids of nuts, green fruit, varicoloured fruit, hard fruit and soft fruit. The grown-ups and children were tucking in without more ado. There were white grubs, a little on the hairy side, that had the exquisite savour of crayfish; putrid worms from the Mauritius Palm, looking like *gnocchi*; earthworms, squeezed and cleaned, their flesh the colour of loin of pork, or when they were served in heaps, rosy like spaghetti and tomato sauce. There were whole honeycombs taken from the wild bees, the cells full of brood; the look and smell of them was like rich pine-kernels;¹ bags of honey, which when mixed with water gave a cool, slightly heady drink; small snake-cutlets, like fleshy eels; gigantic Maripa Palm hearts broken into chunks, like crumbly Parmesan cheese; mounds of cut tapir meat and smoked slices of peccary, which were black as coal outside but all rosy and fragrant within, like the heart of a spring lamb. There were bundles of fish dried and toasted over the fire, which ate with something of the flavour of almond cake, though it was more exotic. . . .

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The leaf-wrapped viands hovered sizzling over the flames, and the greasy savours breathed out into the night air, so that the animal-lair atmosphere of the camp was wreathed in a homely smell of cooking. But for our part there was only hunger, stretching like a wide sea whose tides beat against the fertile shore of the Samatari land, with its sweet-smelling mountains and fruit and game and its propitiation to the gods of plenty—the duly gnawed bones hung up over the fire lest the smell of them should warn off the next day's bag.

But we, in our ocean of hunger, had at least one satisfaction—our hammocks, our warm and welcoming hammocks, made of stout cloth. They swung like glorious battleships over the wretched little flotilla of the tiny Samatari contraptions.

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The Samatari, whose possessions are so simple as to be almost non-existent, have three types of hammock, depending upon the resources of the country round about, since they never carry their sleeping gear with them but always improvise it on the spot, except in very special cases where the rich and great affect a snobbish luxury. The most elementary model is composed of three or four strips of the flexible bark of the *Annona* which is known in Guiana as

¹Used in Italian cooking.

CAPTURED BY THE SAMATARI

Yara-Yara. These strips are a few centimetres wide, their ends being twisted into a rope and tied to two trees. Less common is the hammock made from the rootstock of an *iriarte*, the palm which tends to cling slyly to the traveller with its thorns, lurking on the young shoots. The rootstock often lies above ground, twice the length of a man's arm and almost as thick. It is carefully stripped of its spines, which come off easily, and then clubbed to a pulp. In this way the very strong fibres are easily removed. They spread open very readily, and the Samatari are careful not to pulp the ends, leaving seven or eight inches of the rootstock intact so that it can be hung on to any convenient spur on a tree.

Finally there is the hammock de luxe, the one the snobs carry with them because it takes a certain amount of time to make and its more select raw material cannot be found everywhere. This is a superlatively strong liana known in Spanish as *alambrito*, or wire, because of its strength and its habit of growth. Quite apart from its use for hammocks among the Shirians, this liana is one of the main forest products, being used for all sorts of purposes by all the inhabitants, from the most civilized to the most primitive. It serves for binding the walls of huts, for weaving and basketwork and, as we have said, for hammocks of a superior quality.

This liana is about as thick as a pencil and easy to peel and slip open into a number of pliable white strands rounded on one side and flat on the other. About a hundred of these strands, banded together halfway between the two ends with twisted bark rope, make the hammock. It is strong and springy, but alas, like all Shirian hammocks, unstable, uncomfortable, and very small. Stretched out in them, with the imprint cutting deeply into their skin, the Samatari pass their nights without stirring, their feet on a higher level than their heads as if they were following the most modern therapeutic principles, smoking themselves in the piquant fumes of their fire, which is kept continually burning and replenished by the more youthful members of the tribe. The fire is their blanket—the blanket of the night—as they themselves call it.

At some point during the night, Solituan turned up wearing my trousers. After they had made their mysterious rounds, it seemed, they had fallen to

AT HOME WITH THE SAMATARI

there for the taking in the forest and the supply, from both animal and vegetable sources, is inexhaustible. 411

The bow is of surprising dimensions. It is six feet six inches long, this being equivalent, considering the height of the archer, to nine feet nine inches for us. 411
The simplest pattern is made from the *sele* palm. They also use a hardwood— 824
from a tree known in Venezuela as the 'golden pole'. This is very rare, almost as rare among the Indians as metal. But the finest bows of all, possessed by the few and worth a fortune, are made from the corozo tree, the *lahu* of the Shirians. This wood is extremely hard but very fibrous, with the elasticity of a steel spring. The shaping and fining down of these bows, and the making of the arrows, is the one form of craftsmanship known to the Samatari. With this they occupy themselves during the rainy season, under rough roofs of palm leaves. A tree belonging to the Moraceae family furnishes the very tough fibre for the bowstrings: it is found all along the river-banks and in the forest glades. [283]

The slender arrows, six foot six inches long, are made from a cane cultivated in the secret depths of the forest, though it grows naturally on any of the river creeks which flood regularly. Curassow or guan feathers, split in half, are bound on to the cane. [237]

There are three types of arrow-head, according to the purpose for which they are to be used. The lightest is a splinter cut from the shinbone of a monkey, firmly fixed to the end of a short stick, in such a way as to form a sharp-pointed prong. This is used on small animals, and especially for birds and fish. There are numbers of big fish, like the *pampano* and *surapiri*, which lie near the surface so that a slight rippling of the water betrays their presence. The arrow which pierces them cannot be shaken out, and its length and weight make it difficult for the wounded fish to get very far. [237] [226]

Another kind of point is virtually a miniature spear fashioned out of a very hard bamboo cane. Very sharp, and razor-edged, it will strike deep into the most resistant flesh, the toughest hide. The Samatari use this on the bigger game, such as tapir, and also for war—though for the latter purpose it is superseded by a specialized warhead. This is a sharpened splinter of palm wood—the same as goes to the making of the bows—dipped in a red poison made from the bark of a certain tree. A series of rings, four or five of them, are notched out round the arrow-tip, so that it is weakened at these places. If the tip strikes bone on entering the body, or if the arrow is pulled out, it snaps at one of these weakened parts, leaving the broken tip embedded in the flesh so that 411 726

/455 cont./

- 283 Cotton is spun by means of a hand spindle. This thread is then twisted into three-thread cords.

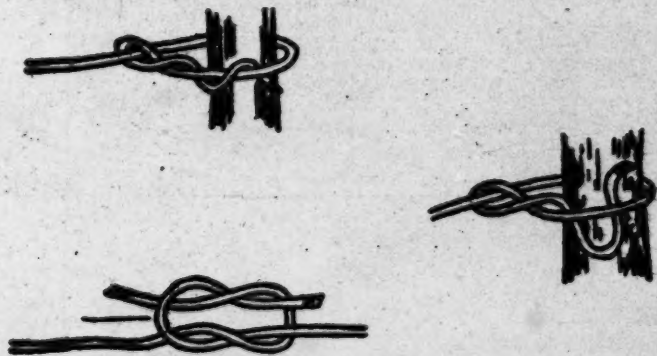
Various fibers of bark are twisted to make bowstrings or fishing lines. These same fibers of bark are frequently plaited to make hammock strings.

The fiber of a certain plant similar to the pineapple is also extracted and twisted, producing a very tough cord.

- 284 The knots which the Gwaika /Waica/ make are very simple and practical. The timber hitch is employed in all cases in which a flexible cord is used. This includes the stringing of the bows. The hammock is hung using a timber slipknot. This knot is made in such a way that it can be instantly untied by a pull. The square knot is used to join the ends of two cords. In the accompanying Fig. 2, we show drawings of the three knots concerned.

- (411)
(352) 287 /456/ A band of bark is made for carrying children. First 854 they obtain a stick of the right size, which is beaten with another stick for several days. The scaly outer bark comes off. Finally, the smaller end of the cylindrical bark is inserted into the larger end (of greater diameter), and the two are then firmly sewed together. The result is a band or strip without rough or cutting edges, which remains flexible and useful for many months.

284



/Fig. 2/

/463 cont. /

373 as well as to light the path. Torches of gum and resin are also
416 used sometimes on the paths during the night, but the common
484 type of torch is the fagot of tied pieces of wood. A group which
travels at night (as occurs when they are returning after nightfall
from the work of fishing) may carry only one torch. Then they
stop from time to time to arrange the joined sticks and to revive
the fire, keeping it from going out.

373 The wood fire is the principal source of light and heat in the
374 settlements. The fires are kept lighted during the entire night,
both to produce warmth and for protection against predatory
animals and the spirits of human beings which have returned.

372 There do not seem to be any beliefs or ceremonies related
to the production and maintenance of fire.

Weapons

411 The principal weapon of the Guaica /Waica/ is the bow and
arrow. They also use macanas.

(824) The bow is made of palm wood, generally of "piguao,"
(283) with a strong string made of threads of bark. This string has
three or more threads of twisted bark, which give it great
strength.

(249) The shafts of their arrows are made of the festooned part
(237) of a certain wild cane, which they cultivate in their "conucos."
They feather them with the points of wing feathers of wild turkeys.

Arrow points vary according to the type of game which is
to be the target. The wide bamboo point is used /464/ principally
against large land animals; the bone one for shooting large
and medium-sized birds, and the poisoned points principally for
monkeys. Any of these points might be used against man in
the event of war. Against small birds they shoot the shaft,
first removing the point, or they use a point ramified at the end,
made out of a small branch quickly broken off some nearby
plant. The accompanying Fig. 7 /see p. 35/ shows the different
types of arrow points of the Guaika. /Fig. 7 appears here. /

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middle of the camp, but they preferred to sleep under a simple palm roof resting on four poles which had been erected near the river as a temporary measure when the first advanced party arrived. There they hung their hammocks, made of the same pliable liana threads as their loin-cloths. Apart from their bows and arrows, these hammocks were the only possessions they brought with them. Thus they passed the night close to the river and their boat. They lighted fires and kept them burning all night. Not all of them slept in hammocks. Some squatted on the bare ground close to the fires, but those who used hammocks slung them low to get the maximum benefit of the fire's heat, for all slept naked. [123] [352] [283] • [513]

The next morning they came over to the empty *ranch* where we gave them *manioc*, which they knew and appreciated as a special treat. But they refused the cooked food we offered them. One or two of them tasted it, but quickly spat it out. We offered them meat and learned that they cook their game without first skinning it. We gave them salt, which was new to them and which they spat out with dreadful grimaces. It was probably the salt that made them refuse our cooked food. They never tired of *manioc*, and we discovered that *manioc* and *machete* were the only two Spanish words they knew. [192]

The Guaharibos have a curious and revolting habit of secreting in their mouths between the lower gums and the lip a roll of green tobacco as big as the stump of a fat cigar. They do not chew it; it remains there unbroken all day while two streams of greenish juice continuously trickle from the corners of their mouths. Even the children and sometimes the women indulge. The lump, which horribly deforms the lower part of the face, making it look hideous, may have contributed to their reputation for ferocity and savagery. The preparation of the tobacco quids is the duty of the women. The fresh tobacco leaf is rolled with wood-ash, and then the women chew and soak it in spittle until it reaches the right proportions and consistency before passing it on to their mates. Cardona told us this was the universal practice. 276

The Indians' fear and suspicion of us quickly dispersed. 123

302 Both men and women and even the small children paint their
[386] faces and bodies with a violet-ish dye extracted from the edible
berry of the manaca palm. Sometimes the dye is mixed with
the red clay from the river bank. As a dye it persists well, for
it often has to compete with many layers of dirt and does not
302 seem to wash off with sweat or rain. The patterns in which
531 it is used vary considerably. All-over dyeing of cheeks and
forehead is common, though sometimes vertical lines are pre-
ferred, either straight or wavy. The designs are never angular
and the same motif is rarely repeated. One freshly-painted
warrior had his face, neck and chest painted all over a violet-
red, while his back was painted with a series of half-inch polka
dots arranged in parallel lines. Dots of this sort were also
commonly used with artistic purpose on the upper and lower
limbs. To heighten the contrast some used charcoal to blacken
themselves.

123 Some explorers of these forests have tried to read ritual or
302 war-like significance into this painting of the body. But since
we frequently found freshly-painted individuals in company
with some whose paint was paling and some who were not
even painted at all, I do not think this theory holds good. I
believe it is no more than the expression of a desire to be
beautiful, although it is true that at a later date, when the
natives became menacing, they were all freshly painted.

352 The furnishing of Waika huts is very simple and orderly,
each hut containing anything from four to ten hammocks, and
every inch of space being used by slinging the hammocks one
[286] above the other. Some of the hammocks are woven from
[283] threads of forest cotton dyed in ochre, which quickly fades,
[287] while others are made of thin lianas crudely knotted at their
ends. We saw none of the bark hammocks which the natives
592 invariably use on their journeys. Each hut is the centre of
a family unit, two families sharing the same hut only when
the village is crowded.

162 In the present village of about two hundred and fifty people,
which we called Platanal, only about forty were adult males.

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black, heavy, and very brittle. It breaks easily, but the pieces are used by the men as grinding surfaces for their drug manufacture, or as baking dishes when the women make cassava bread. As we shall see below, only a few villages make the clay pots and trade them to the members of other groups. 323 [463] [438]

The most distinctive feature of Yanomamö technology is that it is very direct.⁴ No tool or technique is complicated enough to require specialized labor or raw materials. Each village, therefore, can produce every item of material culture it requires from the jungle resources immediately around it. That is, the simplicity of the tools, the processes of manufacture, and the distribution of resources are such that each village can exist independently of its neighbors as far as technological requirements are concerned. Nevertheless, some specialization in trade and manufacturing does occur, but it seems to be more closely related to the development of political alliances and is therefore discussed in a later chapter. I will describe the material culture at this point and relate it to the over-all adaptation later in this and following chapters. 32 [128]

WEAPONS Wood for bows is obtained from two species of palm tree, one that grows wild and one that is cultivated.⁵ The bow is very heavy because palm wood is extremely dense. One cannot, for example, drive a nail into palm wood. The fibers that go into the thick bowstring come from the inner bark of a tree; these are twisted into a cord by rolling them with the palm of the hand against the thigh. The cord is so strong when it is new that it can be used as a hammock rope, but it deteriorates with age and must be replaced periodically. The bow itself is shaped with the lower jaw of a large, wild pig. The canine teeth in the pig's lower mandible are worn to razor-sharp edges by chewing and make magnificent cutting tools; the bow stave is held vertically and the mandible is planed up and down the surface, each upward stroke shaving off a fine layer of wood. After much labor and patience, the bow is completed. It has a circular or oval cross section and is very difficult to draw. Most Yanomamö bows would compare favorably to our best hunting bows in strength. 411 [824] [283] [412] [237]

Palm wood is also used for one type of arrow point. A splinter of palm wood about 15 inches long is smoothed down to a fine point, and several lateral grooves are cut into it along its length. This is done so that the point will break off in the body of the target. This type of point is covered with curare poison, which slowly dissolves in the animal (or man) after the point has broken off. This point is used most frequently for monkey hunting, as monkeys tend to grab hold of branches and tree trunks when they are wounded. The curare relaxes their muscles, and the monkeys sooner or later fall to the ground. Unless the point were coated with curare, the animal might die high in the treetops and could not be easily recovered. The Yanomamö also carry large supplies of extra palm points in their bamboo quivers since these points break whether or not the arrow strikes the intended target. This type of point is manufactured in large quantities in several villages and is traded to other groups. [824] [278] [224] [438]

The curare vine is also collected wild from the jungle. It is soaked in hot water to leach out the active ingredient. The water containing the poison is then painted onto the palm-wood points over glowing coals; the water evaporates, leaving a brown, sticky 278

⁴For more details on Yanomamö material culture than are given here, see Bucher (1960) and Zerries (1964).

⁵The cultivated palm, *Pygea*, produces a desirable fruit. It is cultivated for the fruit, but the wood of dead palms is used in bow manufacturing. [245]

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Another important cultivated plant is tobacco. Since men, women, and children all chew tobacco, the patch of ground devoted to its cultivation is quite large. Each family grows its own supply and jealously guards it. It is one of the most commonly stolen crops and, therefore, frequently has a conspicuous stick fence around it to draw the thief's attention to the fact that its owner shows a strong concern for its welfare. A man will even put a fence between his own tobacco and that of his father, should the two crops be planted side by side, and neither man can take a plant belonging to the other without permission. I also saw a young man place a number of sharpened bones in the ground near his tobacco patch so that a thief might suffer a serious foot wound should he trespass.

Cotton is the last plant to which major significance can be attached. The fibers are separated by hand from the seeds and spun into thread with a stick whorl, then several threads are twisted into a thick yarn. The yarn is rolled into balls about the size of a grapefruit and stored until enough has been accumulated to make a hammock. Frequently the balls of yarn are traded to the members of other villages.

The hammocks are manufactured on a crude frame consisting of two upright poles located about 6 feet from each other. The yarn is wrapped around and around the two poles until the desired width of the hammock is reached, usually about a yard, perhaps a little more. About a dozen vertical seams are braided into the horizontal strands of yarn; the poles are removed after the ends of the hammock have been tied with a few strands of cotton string, and the new hammock is completed (see Fig. 2-7). The women also use the yarn to make a short waistband, armband, and halter, and the men use it to make fat, round belts. All ages and sexes use it as a wrist, ankle, knee, and chest cord, and the men make a waist cord of the string, to which they tie their penis foreskins.

Numerous other plants are cultivated in the gardens, but are not as significant in everyday life as those discussed. They include leaf fibers, *bixa* pigment, avocados, drugs, water gourds and gourds for making spoons and ladles, a kind of squash whose seeds are eaten and whose yellow flowers are used by the young girls as decorations, sugar cane, cashew trees, papaya fruit, hot peppers, and a host of magical plants.

Most of the magical plants are associated with benevolent or at least nonmischievous functions. "Female charms" (*tsa bärö*), for example, are used by men to make women more receptive to sexual advances. The dried leaves of the magical plant are mixed with a fragrant wood, and the resulting powder is said to be able to make a reluctant female hungry for sex. Most men carry a small packet of this at all times. The powder is held in the palm of the hand, which is then held firmly against the nose of the female: She is forced to breathe it into her lungs. After she has done this, she becomes very receptive, and can thereafter be easily seduced by the man who charmed her. Another magical plant is cultivated by the women. Its leaves are thrown on the men when they have club fights because it allegedly keeps their tempers under control and prevents the fight from escalating to shooting. Still other plants are cultivated to insure that male or female children grow up to be healthy adults, a different plant being associated with each sex.

Some of the plants are cultivated for malevolent purposes, such as causing the women in enemy villages to have miscarriages or pains in the back when they are preg-